

**OBJ:**

**Definition:**

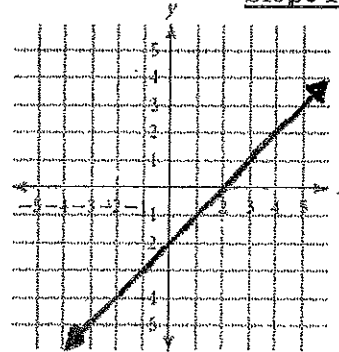
**Ex:**

**A.**

**B.**

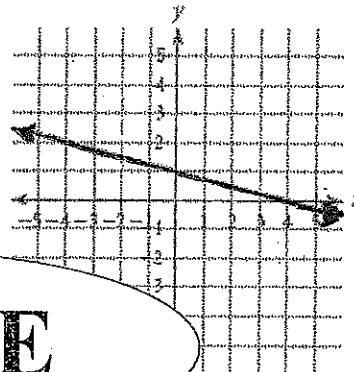
**Slope From a Graph:**

**A.**



Positive :

**B.**



Negative :

# SLOPE

**Slope From Two Points:**

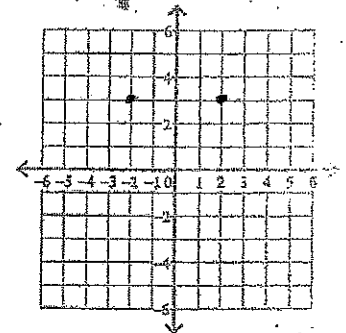
**Ex:**

**A.**

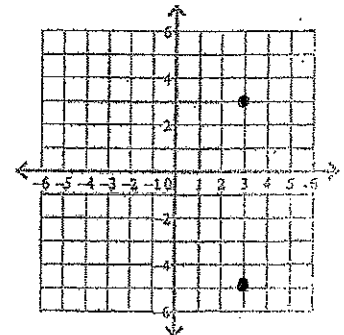
**B.**

**Special Cases:**

**Horizontal Lines:**



**Vertical Lines:**



Name: \_\_\_\_\_

## Slope Practice #2

Date: \_\_\_\_\_

Determine the slope of each line by counting the vertical change (rise) and the horizontal change (run).

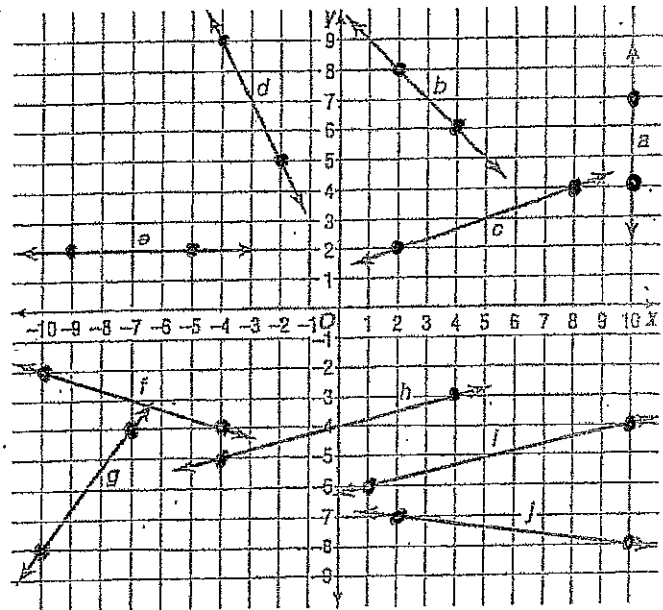
1.  $a$  \_\_\_\_\_ 2.  $b$  \_\_\_\_\_

3.  $c$  \_\_\_\_\_ 4.  $d$  \_\_\_\_\_

5.  $e$  \_\_\_\_\_ 6.  $f$  \_\_\_\_\_

7.  $g$  \_\_\_\_\_ 8.  $h$  \_\_\_\_\_

9.  $i$  \_\_\_\_\_ 10.  $j$  \_\_\_\_\_



Find the slope of the line. (Simplify)

11. rise = 5, run = 10 \_\_\_\_\_

12. rise = 6, run = 0 \_\_\_\_\_

13. rise = -4, run = 2 \_\_\_\_\_

14. rise = -12, run = -18 \_\_\_\_\_

Calculate the slope of the line that goes through each pair of points. SHOW ALL WORK!  $m = \frac{y_2 - y_1}{x_2 - x_1}$

15. (2, 5) & (3, 6)

16. (4, 1) & (-4, 1)

17. (4, 1) & (-6, -4)

18. (-2, 4) & (10, 0)

19. (2, 7) & (-2, -3)

20. (3, 2) & (3, -2)

21. (-5, 4) & (6, -2)

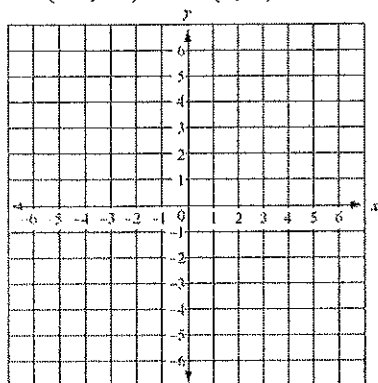
22. (2, 3) & (9, 10)

23. (9, 2) & (3, 5)

**Slope Intercept Form :**

Y-intercept:

Plot  $(-3, -3)$  and  $(3, 1)$  draw a line between them:



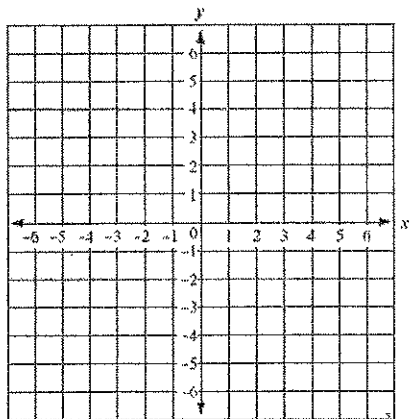
1. What is the slope of the line?
2. What is the y-intercept of the line?
3. Write the equation in slope-intercept form:

**Graphing Equations in slope intercept form:**

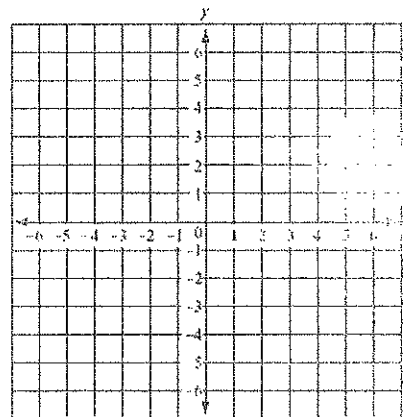
- 1.
- 2.
- 3.
- 4.

**Examples:**

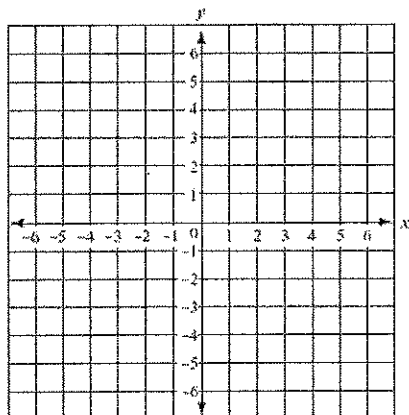
A.  $y = -\frac{1}{2}x + 3$



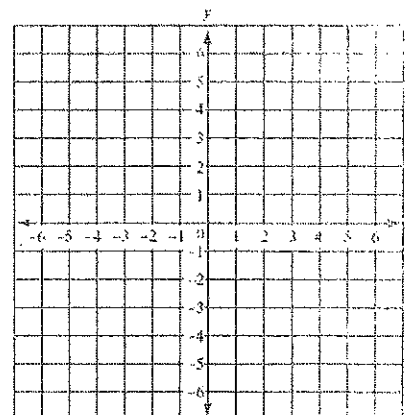
B.  $y = 3x - 1$



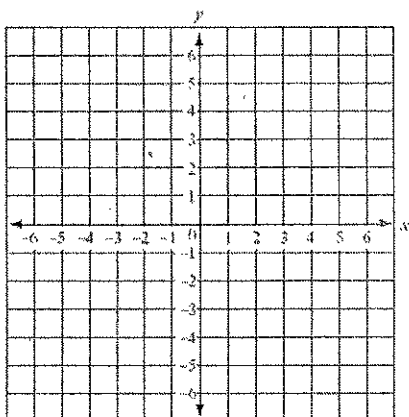
C.  $y = -2x + 5$



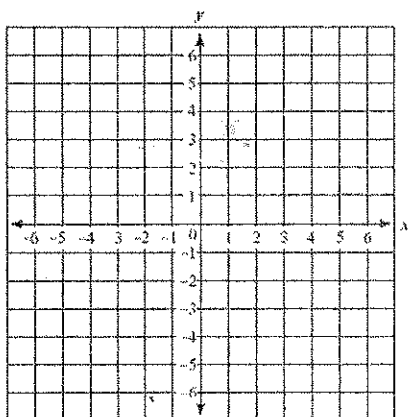
D.  $y = -\frac{3}{2}x$



E.  $x = 3$



F.  $y = -5$



G.  $y = -x$

